Figure 1

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Figure 2
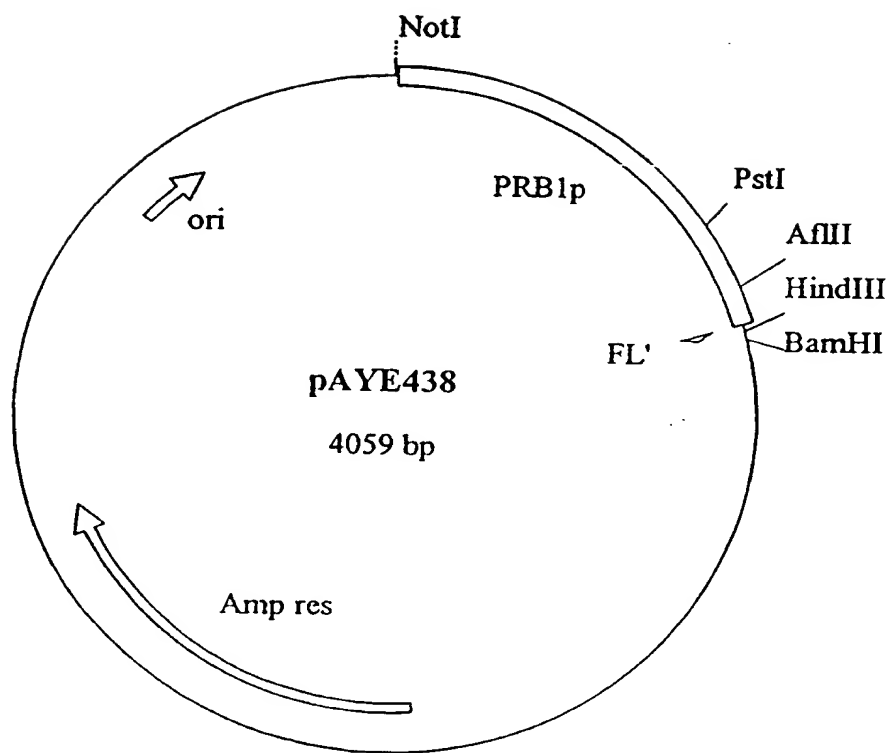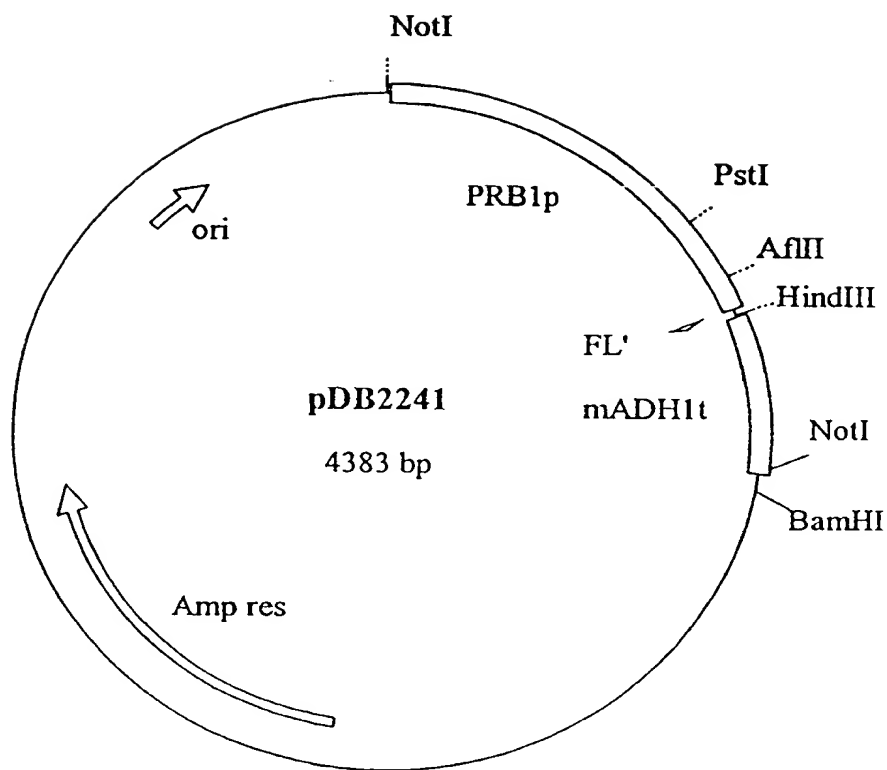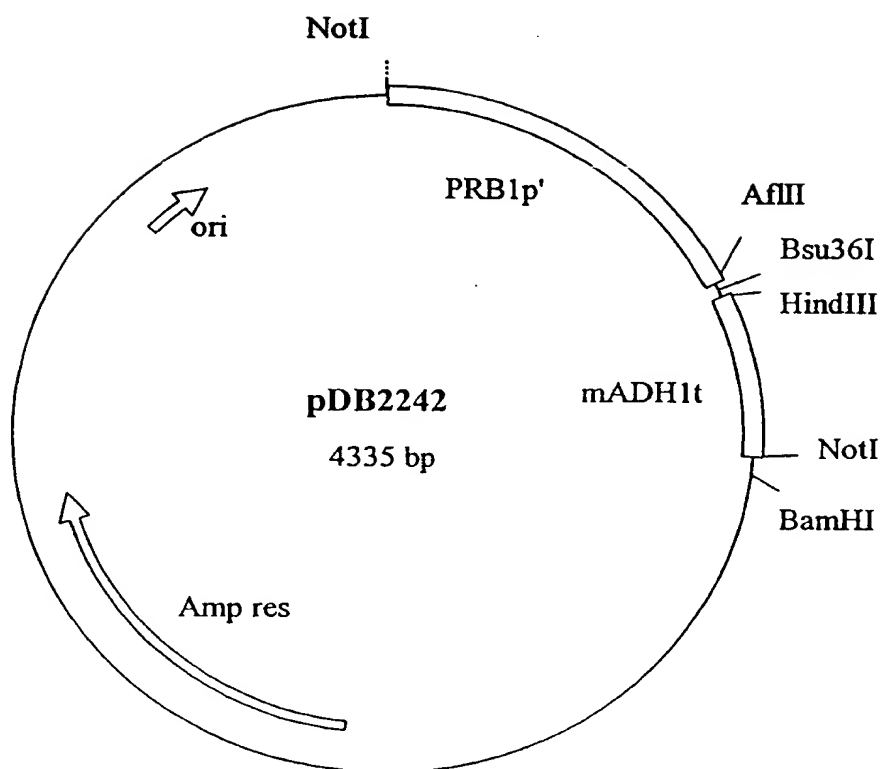
Figure 3

Figure 4

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Figure 5
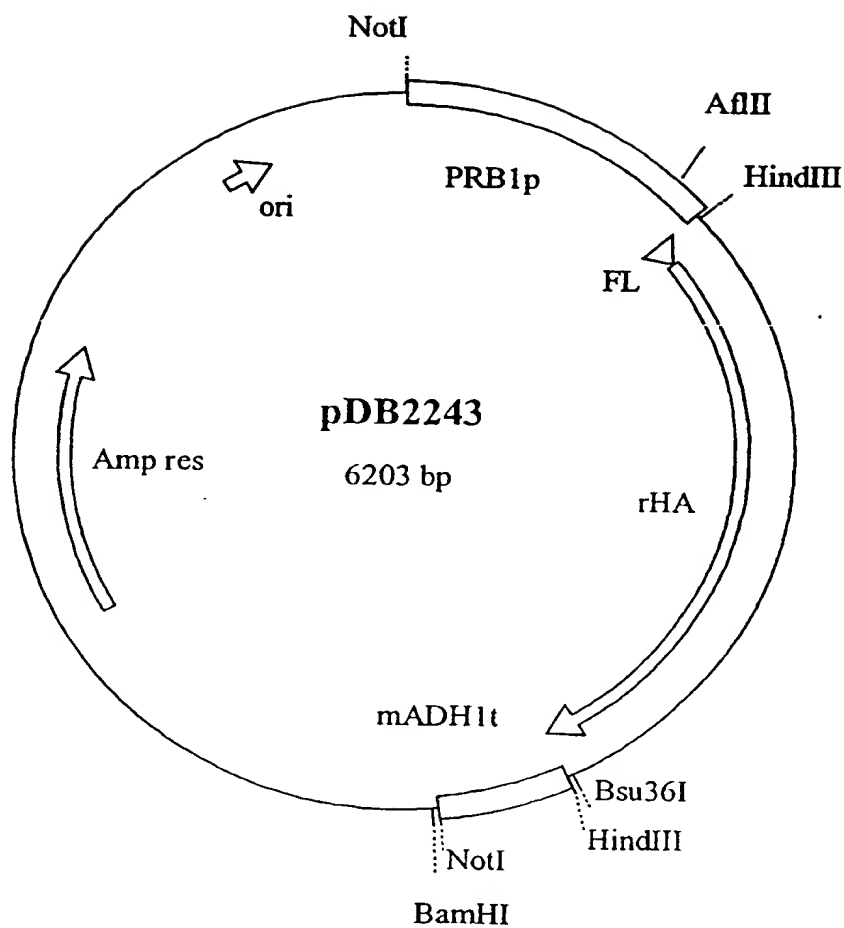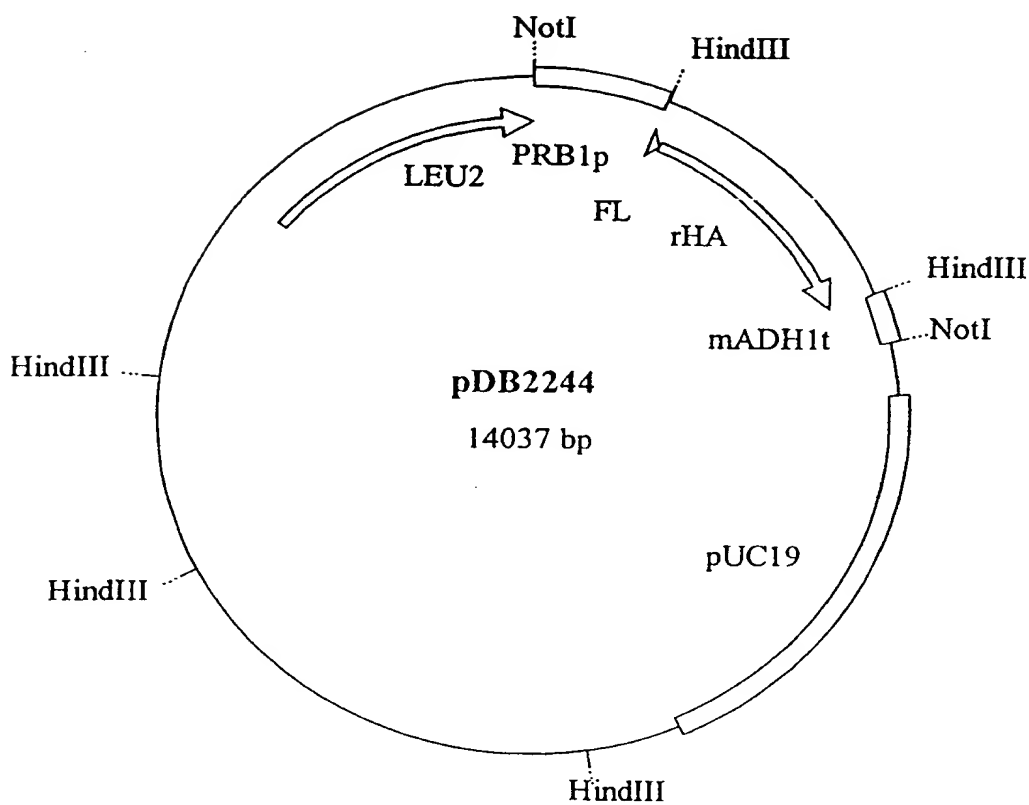
Figure 6

Figure 7

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Figure 8

○	pH 4.0
▽	pH 4.5
□	pH 5.0
◇	pH 5.5
△	pH 6.0
○	pH 6.5
○	pH 7.0
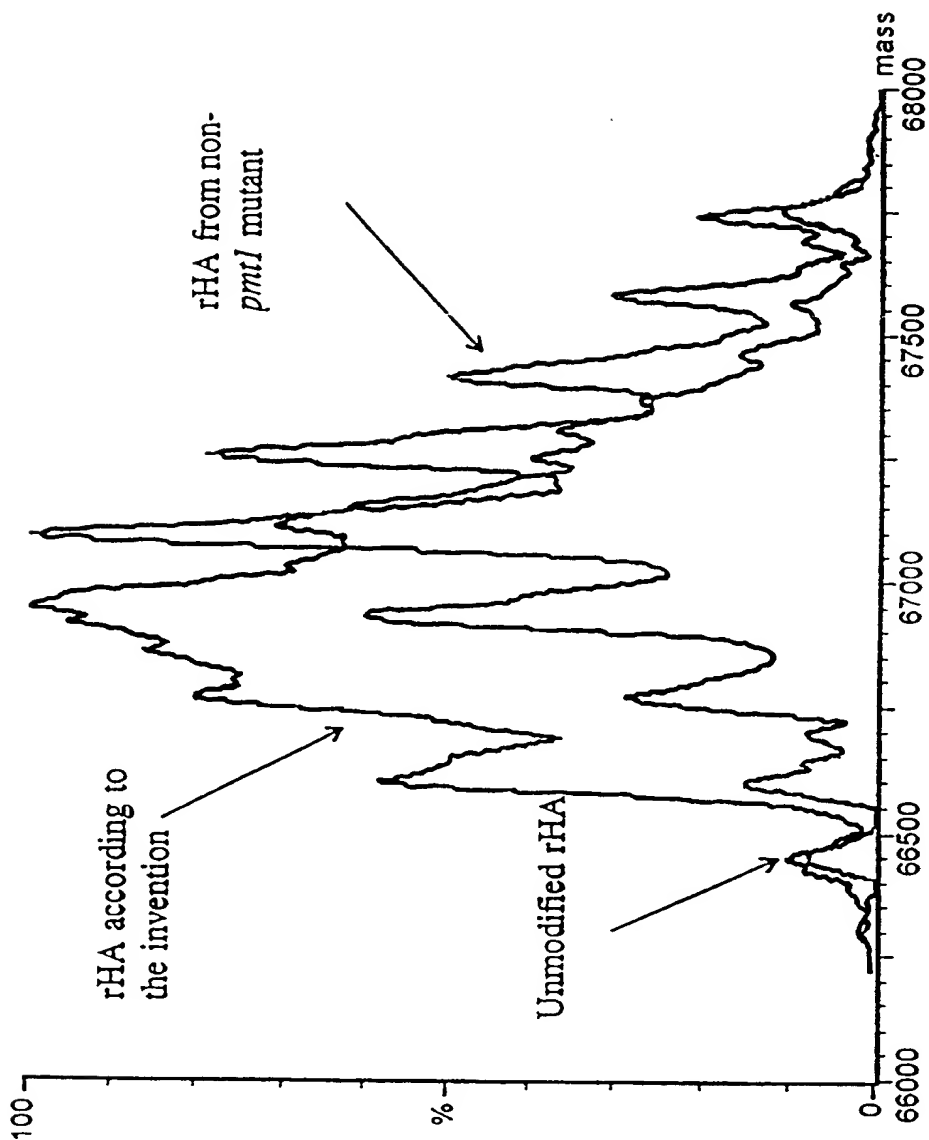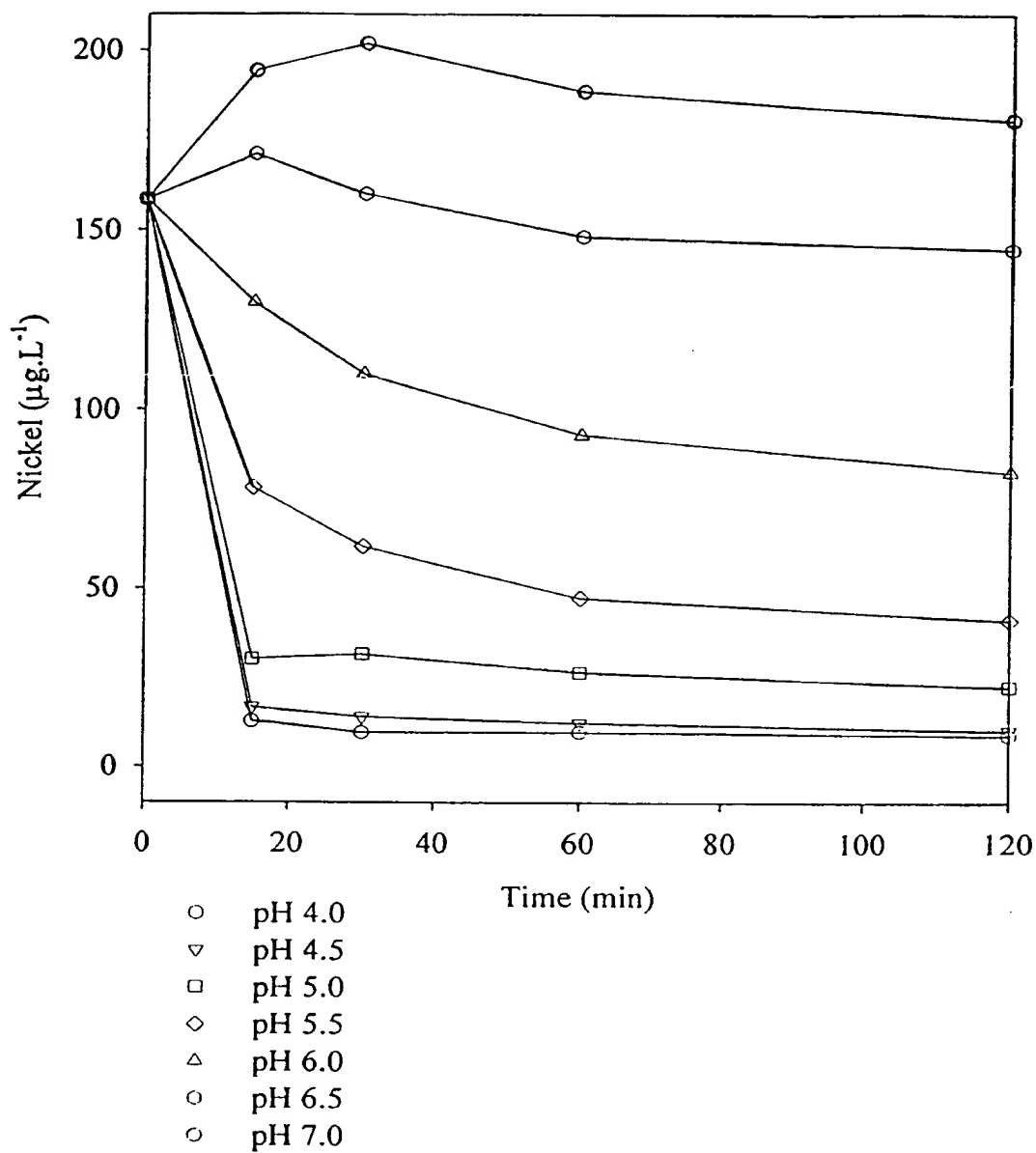
Figure 9

5'-GATTGGCAGAAGAGGTATCTGCTTATGGACATGAGGGGCTTTGGCGGT
GATGCCAATGATGACTTTGTTGTGGAGATTGCCAAGGATCTTTCAACTAC
TGAAGAAGCTAAGGAAAACGTTAGGGCCATTCAAACTGTTTTTAGATTGA
GACATGCGATGACTGGTTGTTACTTGTTCTCCCACGAAGTCAAGCTTCCC
AAGTGGGCATATGAGCAACAAGAGGTTACTTGTGCTACTCAAGGTATCAA
ACCCTATCTTACTGGTACGTTGAGACCAACGAAACCCATTCTTGGATAA
AGAGGTTGATGAAATAGTTAGCTATCCTGTTCCGACTTTCTTTCAAAGGTT
GCCGACTCACGCCAGAATGTGGAAGATCAACAAGGCTTACTGATCATATG
CTATGAATCCAGTCCAGATCTTGG-3'

Figure 10

5'-GTGTTGCAGTTGTAGTCCCACTTGAGTATCTTGGATTCGTTGCATTGGT
CCTTGGTCCATCGTCCTGCATAGATCAATGGGAGAATATCTTTGGAAGAT
AGAAAGCGCAACGGCAAAAAAGAGAACGAATATGGAGTAAGACACAACC
TGTTTGTTTTTGAAGACATAAGAGTGAATAATCTCAAACACATGTCCGAG
AGCCAATATACCAAAGTACAATGATGGTAGATAGTGGTGCAAAAATAGCT
GACGGGCCATAAGGGAAAGATGGCAAGTAATGCAGTACCCATCCTAGGA
TGTAATGAAGCATTTGAACATTGAAGTTGAGCACAGTTGGGTCAACGCTG
AACCCAAAACCTCTTTGCCTCTCAGAATAGAGAAACCAAAAAGACAGAG
AACAAAGCATACTTGCGGTGACTGTCACCAAGTGACAGCATTCCTATGAA
ATAAATTG-3'

Figure 11

5'-TACGTTATGGATGTGCATCCACTTCCTGAAGCTTCTCATCGGCAACCTT
TTGAATCTGCAATTTATTATCTTCATTGAAGGCAAGCTTGAACACTTTGAC
GGTAGAAAGACGAGCGACAACCAAGAATTGCCCGTCAGAAGTGAGATCA
CAATGGGTGATGTTGTCCTCATCGCTTAGGACCAGTTTGGCTAATAGTTTT
CTGCCTTGCTGAGGAAGGACTTTCCATACTTTAATGGTTTGGTCTTGCCCA
TGATCACCAGCTTCTGGGATTTATTGAAAAGGACAGTTTGATCGTTTCAG
GGAATACTGACAGTCTTTGAATTTCGCAGTCTTGAAACGATTCAGCTTAG
AAACGGCTATGTCTGACAATGATGCTTCAGATAGTACAGATCGAGGTCCT
GGATTGG-3'

Figure 12

5'-GCGCAGGTGACTTCTTGCTGGAAAATGTGCTACAAGGAGGTAAAGACC
GTGTCATTGAGGGCCTGGTTTGGTCTACTTATGACGATTACCCTCGTCGTC
TGTTTTCCATTGGTGGTTCGACTGTGATGACCGAATGGGATATTGCTACCG
GTTTGCCCTTAAACAACTACGATTGTAACTCCGGTATCACCTGGAGTATC
AGCATCAACACAACTCAGGATAAGATATGCGTAGGCTGTGACAATGGAA
CTGTAGTCGTTATTGACATAAGTGGTGGACCGGGATCTCTAGTATAAGAA
AATTGTATCCGGATGTTCTGATGGCCGATAAGGATATGGAATACGAGGAA
G-3'

Figure 13

5'-GTATTGCAGTTGTAGTCCCAGAATGAATTGCTCTTTTAATTGTTCTTTTT
GGCTGGAGAAGTGCTCGTATGTCTTGATCGATGAGATACAGCTGAGATTT
AAGTTGTTCTAGGTTGATAGTTGAATGTTCAGAGTTGAGGGGTTCCATGG
TCAAGTATAGGAGGATCCAGCTCATCTAGGGAGTGGAATTGAGTACTGAC
ACTCATTACTGGAAGAAGTAGAAAGAGTACTGGTTTTGTGGTAAGTTCCA
TATTTCAGATGTCTGTAGATGGTCGAGCGAGGTGAACATTTCATAGGAGA
TTTCAGAGGAGTTGGACTTTGAAAATGGTGACAAAAGGTAGACAGAAGA
AAGGTTAGAGAGTGCAGTGATTCAAGGTGGTTGCAGAAGTCC-3'

Figure 14

5'-TTGAGACATGCTATGACGGGTCAAGTTTTTAGATAAAGTTGGACTCTTG
GGCATGAGCGCATCCTCACATCGGCCATAGCAGATAAACGGTAGCAGTTT
TTTTGAACGAGGCTGTAAGATAGGGGAATCTCCGTTTTAGGCTTTCAGTG
ACTTGTTGCATCGCAATGGGTAGATATGTTCACCAGTGGCAAAAGCTCTG
GATGCTATGAAACTGACCAAATGTGGATTAGAACTTGGAGTCTAACTATT
TGACTCTAAGAATTTCCAATTTTTGCCTTCTACTAGCCATTTTCTACTTTC
ATGGGACATCATCACTTATTTGCTCCCCAACCTGTCAAATACCCACCAAT
GTTCAAGGTCG-3'

Figure 15

5'-AGATTGAGACATGCTATGACGGGTTGTTACTTGTTCTCCCGCGAAGTCA

AGCTTCCCAAGTGGGCATATGAGCAACAAGAGGTTACTTGTGCTACTCAA

GGGTATCAAACCACTATCTTACTGGTACGTTGAGACCAACGAAAACCCAT

TCTTGGATAAAGAGGTTGATGAAATAGTTAGCTATCCTGTTCCGACTTTCT

TTCAAAAGGTTGCCGAGCTACACGCCAGAATGTGGAAGATCAACAAGGG

CTTAACTGATCATCATGTCTATGAATCCAGTCCAGATTCTTGGCCCTTCCT

GTCAGAGGTATAAGCTACTGGTCAAAAAATCACTCCAAATTATTTCATAG

GTAATGCTGCACTTGGTGGACAGTCACCGAAGTTTG-3'

Figure 16

5'-GTGTTGCAGTTGTAGTCCCACTTGAGTATCTTGGATTCGTTGCATTGGT
CCTTGGTCCATCGTCCTGCATAGATCAATGGGAGAATATCTTTGGAAGAA
GAAAGCGCAACGGCAAAAAAGANAACGAATATGGAGTAAGACACAACCT
GTTTGTTTTTGAAGACATAAGAGTGAATAATCTCAAACACATGTCCGAGA
GCCAATATACCAAAGTACAATGATGGTAGATAGTGGGTGCAAAAATAGCT
GACGGGCCATAAGGAAAGATGGCAAGTAATGCAGTACCCATCCTAGGAT
GTAATGAAGCATTTGAACATTGAAGTTGAACACAGTTGGGTCAACGCTGA
ACCCAAAACCTCTTTGCCATCTCAGAATAGAGAAAACCAAAAAGACAGA
GAACAAAGCA-3'

Figure 17